



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,173	09/24/2002	Michael J. Collins	1700.89C	4893

21176 7590 10/17/2003

SUMMA & ALLAN, P.A.  
11610 NORTH COMMUNITY HOUSE ROAD  
SUITE 200  
CHARLOTTE, NC 28277

EXAMINER

GAKH, YELENA G

ART UNIT	PAPER NUMBER
----------	--------------

1743

DATE MAILED: 10/17/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/065,173

Applicant(s)

COLLINS ET AL.

Examiner

Yelena G. Gakh, Ph.D.

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-2, 4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1743

### DETAILED ACTION

1. Amendment filed on 09/09/03 is acknowledged. Claims 1-2 and 4 are pending in the Application.
2. The rejections established in the previous Office action are withdrawn and the new ground of rejections is applied in the present Office action.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1743

6. **Claims 1-2 and 4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (AOSTRA J. Res.) in view of Collins (US 4,554,132) or Bostian et al. (J. Assoc. Off. Anal. Chem.) and Jerosch-Herold et al. (US 5,289,124).

Thompson discloses samples for NMR measurements comprising an organic portion containing at least some fats and oils placed in thimbles with thimble holders made of Teflon (page 137, right column, Equipment).

Thompson does not specifically disclose the samples placed on low mass, porous, hydrophilic and lipophilic pad, made e.g. of glass fibers, or drying samples one after another.

Collins or Bostian disclose a fat and oil sample placed on a sample pad transparent to microwave radiation and free of protons, of low mass, porous, hydrophilic and lipophilic (e.g. glass fiber filter (Collins, col. 5, line 5), Bostian, page 876, right column). The fat and oil samples are partially melted, since they are placed in a microwave.

It would have been obvious for anyone of ordinary skill in the art to slightly modify Thompson's samples by using pads disclosed by Collins or Bostian instead of thimbles, because such pads are more efficient for holding oil-and fat-containing samples disclosed by Collins and Bostian and therefore expand the range of possible samples.

Thompson in view of Collins or Bostian do not particularly disclose a sheet material free of protons which wraps the sample on the pad.

Jerosch-Herold discloses samples for NMR relaxation measurements sealed with Teflon tape in order to preserve the samples.

It would have been obvious for anyone of ordinary skill to slightly modify Thompson-Collins/Bostian's sample by wrapping it with the Teflon wrapper, as taught by Jerosch-Herold, because in both cases the Teflon wrapper preserves the sample and prevents absorbing additional water or losing moisture content of the sample.

### ***Response to Arguments***

7. The arguments regarding rejections over AOAC and Kock prior art are moot in view of the new rejections. The arguments regarding Jerosch-Herold prior art are not persuasive. First, Jerosch-Herold discloses the samples for NMR relaxation measurements, and therefore his patent

Art Unit: 1743

belongs to analogous art; second, he discloses Teflon wrapper exactly for the same reasons as the instant invention, i.e. to preserve the samples from the influence of an external environment. Therefore, there is a direct motivation for anyone of ordinary skill in the art to use Teflon wrapper for Thompson-Collins/Bostian's samples in order to perform NMR relaxation studies without the effect of the external environment exactly the same way Jerosch-Herold discloses for his samples.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yelena G. Gakh, Ph.D. whose telephone number is (703) 306-5906. The examiner can normally be reached on 9:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (703) 308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Yelena G. Gakh  
10/10/03

A handwritten signature in cursive script, appearing to read 'Yelena Gakh', is written in black ink.